

## DIMOCK, PA

**BACKGROUND:** Information from the Pennsylvania Department of Environmental Protection and Cabot Oil & Gas, consultation with an EPA toxicologist and the Agency for Toxic Substances and Disease Registry (ATSDR), and an EPA well survey, suggested that a number of homes in the Dimock area contained hazardous substances, some of which were not naturally occurring. Circumstances at that time indicated that a health concern may exist. In order to determine the quality of private well water in the area, EPA initiated a CERCLA removal action on January 19, 2012, which included private well water sampling and provision of alternate water to a few residences.

### **Status of EPA's investigation in Dimock**

- EPA initiated a removal action under the response authorities of CERCLA on January 19, 2012. This action included the sampling of a total of sixty-four (64) residences at the Dimock Residential Groundwater site and providing alternate water to four (4) homes. The number of homes to be sampled was initially sixty-one (61), but the number increased to sixty-four (64) based on EPA well surveys.
- To date, EPA has finalized sampling data for 61 of the 64 private drinking water wells sampled in the Dimock area and conditions at these locations do not give cause for EPA to take further action. The most recent set of sampling data (13 homes sampled during the weeks of February 13 and March 5) was provided to residents in early May.
- In three (3) instances, EPA sampling indicated levels of arsenic or barium that exceeded Maximum Contaminant Level (MCLs). Residents at those homes either declined our offer to provide water or had treatment systems designed to reduce levels at the tap.
- Alternate water continues to be provided to the four (4) residences initially identified as needing water. EPA's initial round of sampling data at these locations did not detect levels that required action under CERCLA. To provide certainty to residents at these four (4) locations, where previous Cabot and state data showed levels of contaminants that posed a health concern, EPA re-sampled for a limited list of analytes during the week of May 21.
- The re-sampling results indicated levels of manganese that presented a health concern in one well. (Manganese does not have an MCL, but does have a health advisory level which was exceeded.) Tap samples were not collected at that location, as they had been provided alternate water. To determine whether the existing treatment system at the residence is reducing manganese concentrations to acceptable levels, EPA is collecting an additional set of samples for manganese at that location.
- At the same time that EPA re-sampled the 4 wells, EPA also performed initial sampling at 3 residences where homeowners had expressed interest in sampling but EPA was unable to schedule sampling during the first five (5) weeks of sampling. Results of this sampling are not yet available.
- EPA and ATSDR have met with residents, upon request, to discuss individual sample results.
- EPA plans to release additional data next month. (This will include radionuclide data from all homes, "raw" laboratory data, isotopic methane data, and data from the final 3 homes sampled in late May.)

## **Dimock, PA: Q & A**

### **1. Q: Why did EPA get involved in Dimock? Is EPA's involvement an indicator that the state was not doing enough?**

**A:** EPA visited Dimock, PA in late 2011, surveyed residents regarding the private wells and reviewed thousands of pages of drinking water data supplied to the Agency by some Dimock residents, the Pennsylvania Department of Environmental Protection (PADEP) and Cabot. Because some data showed contamination that presented a health concern, EPA took immediate action to ensure delivery of temporary water supplies to four homes until we were able to collect and analyze our own samples. Because the available third-party data was of uncertain quality and showed elevated levels of contaminants, including some organic compounds not normally found in groundwater, EPA determined that it was necessary to gather its own data and ensure that residents had access to safe drinking water.

### **2. Q: Didn't EPA say at one point that the water quality in Dimock did not present a health risk?**

**A:** Data provided to EPA which included information from both PADEP and Cabot was reviewed by EPA in November 2011 and appeared to indicate that private well water posed no health concerns. At that time, EPA said that the Agency would continue to review the latest data. EPA subsequently received on December 6 from some residents additional data produced for Cabot that warranted a further review of the situation. Also, in the first week of December, in actions unrelated to the situation in Dimock, EPA changed some of its screening levels used for risk assessment, including lowering some values for a number of the chemicals found in the home wells at Dimock. This change, along with the Cabot data received in early December, led to the determination that a health concern existed at four homes.

### **3. Q. What authority is EPA using to further investigate Dimock drinking water quality?**

**A.** EPA is investigating the Dimock situation under the authority of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"). Under CERCLA, EPA has the authority to investigate releases and potential releases of hazardous substances or pollutants or contaminants, including sampling, analysis and other testing that may be required. CERCLA also provides EPA with authority to respond where there is a health concern presented by the release of hazardous substances. An allowable response action includes the provision of alternate water.

### **4. Q: Is this the first time EPA has used its CERCLA authority to look into potential oil and gas contamination?**

**A:** Since the signing of the CERCLA statute in 1980, EPA has responded to hundreds of sites all across the country to provide alternate water when contaminants posed a health concern to drinking water. Most recently after the well blow-out in Bradford Co., PA in April 2011, EPA used its CERCLA authority there to perform sampling and ensure the temporary provision of alternate water to several homes. The EPA's Superfund removal program typically conducts or oversees 300 to 400 cleanups annually. Many of these actions include a release of a hazardous substance, pollutants, or contaminants into surface or groundwater. The EPA performs assessments and tests to determine if contaminants which pose a health threat are present as well as to rule out their presence. Not all assessments and tests verify a health risk or support further action.

**5. Q: Has EPA reached any conclusions in Dimock? EPA's last statement said that no health concerns were found – does that mean that EPA is done in Dimock?**

**A:** EPA's goal was to provide the Dimock community with complete reliable information about the presence of contaminants in their drinking water and determine whether further action was warranted to protect public health. We have now completed sampling of 61 homes included in our assessment. That sampling conducted between January and March 2012 did not indicate levels of contaminants that would give EPA reason to take further action. In the three (3) instances where we found levels of arsenic or barium that exceeded MCLs, residents either declined our offer to provide water or had treatment systems that reduced levels at the tap. To provide certainty to residents, EPA re-sampled in May 2012 the four wells where previous Cabot and state data showed levels of contaminants that posed a health concern, such that EPA had provided alternate water. Those samples, and samples from three additional wells where we had difficulty scheduling earlier sampling, are currently undergoing the analytical and quality assurance process. Throughout the EPA's work at Dimock, the Agency has used the best available scientific data to provide clarity to Dimock residents and address their concerns about the safety of their drinking water.

**6. Does this mean that hydraulic fracturing did not impact water quality in Dimock?**

**A:** From the beginning, the EPA's goal has been to examine the presence of contaminants in Dimock drinking water and determine whether further action was needed to protect public health. Given the EPA's determination that no further action is needed beyond re-sampling the four wells where data previously collected by Cabot and the Commonwealth of Pennsylvania showed levels of contaminants that pose a health concern, additional investigation of the potential source of any contamination is not an immediate priority.

**7. Why is the EPA still providing water to the four homes if the water is safe?**

**A:** The EPA took action to ensure the delivery of temporary water supplies to four homes where data previously collected by Cabot and the Commonwealth of Pennsylvania indicated levels of contaminants that pose a health concern. To provide certainty to residents and ensure a thorough and accurate analysis, the EPA is continuing to provide drinking water while the Agency awaits the results from the re-sampling of the drinking water wells at these four homes. The re-sampling occurred in mid- to late-May and we expect to receive results very soon (i.e., by the end of June).

**8. Q: Has EPA determined the source of the chemicals found in private wells?**

**A:** EPA has not done any detailed review to determine the cause. Our focus has been first and foremost on the drinking water quality and the protection of the health of residents.